INDEX.

Vol. XI., MAY, 1894 - APRIL, 1895.

The notes and reviews signed by initials in this volume are here indexed under the names of the authors.

ABBE, C., Meteorology and Geodesy, 1; Meteorological Problems for Mathematical Students, 15; The Marine Nephoscope and its Usefulness to the Navigator, 54; 391.

Advent of Spring, The, 117.

Alabama Weather Review, 37.

Alaska, Meteorological Phenomena in,

Alexander, E. P., 341.

Allingham, W., The Forecasting of Ocean Storms, 211.

Antarctic Exploration, 69.

Antwerp, Meteorological Congress at, 237, 268.

Arabian Sea, Mean Temperatures, etc., 193.

Arctic Temperatures, 267.

Arequipa, A View of the Harvard College Station at, 146.

Assmann, R., 340.

Atmospheric Absorption of Terrestrial Radiation, 147.

Atmospheric Currents, The Study of, with Telescopes, 395.

Atmospheric Electricity at Sea, 413; Influence of Telephone Wires on, 421.

Atmospheric Pressure, Measurement of, 427.

Audibility of "Big Ben" at West Norwood, 144.

Auroral Results, Dr. Veeder's, 28.

Aurora of March 30, 1894, 77.

Auroras, Sunspots and, 221.

Australian Southerly Burster, The, 448.

BAILEY, S. I., 76.

Balloon Ascents at Munich, Recent Scientific, 419.

Balloon Ascents in Berlin, 422.

Barometer, A Device to Facilitate the Reading of the, 153.

Barometer at Sea, 256.

Barometers and the Measurement of Pressure, 427.

Barometric Standards, South American,

Bauer, L. A., On Cloud Formation (translation), 157; The Results and Purposes of Terrestrial Magnetic Investigations, 273; Meeting in Memory of Prof. von Helmholtz, 421.

Bay of Bengal, Sunspots and Weather over the, 108.

Ben Nevis, A Rough Winter on, 145. Berlin, Balloon Ascents in, 422.

Bibliographical Notes, 31, 78, 119, 154, 198, 238, 273, 313, 351, 393, 426, 457. Bigelow, F. H., Dr. Veeder's Auroral

Results, 28; Solar Magnetism in Meteorology, 319.

Blackberry Winter, The, 349.

Blue Hill Meteorological Observations for 1893, 457.

Blue Hill Weekly Weather Bulletin, 197. Boletim Geographica de S. Paulo, 345. British Association, Meteorology at the,

Bronson, B. H., 355.

Bruce, E. S., 391.

311.

Bruce, W. S., 69.

Burster, the Australian Southerly, 448.

CALIFORNIA, The Effect of Cultivation on Rainfall in, 232.

Carpmael, Death of Mr. Charles, 312.

Cause of the Cyclones of the Temperate Latitudes, 359.

Chevalier, S., 426.

- Chicago Meteorological Congress, Report of the, 79.
- Chief of the Weather Bureau, Report of the, 36, 313.
- Clayton, H. H., Changes in the Definitions of Clouds since Howard, 83; Luke Howard on the Modifications of Clouds, 119; Meteorological Records obtained by Kites, 297; Rhythm in the Weather, 376; Ley's Cloudland, 460.
- Climatic Changes and Sunspots at Aixla-Chappelle, 391.
- Cline, I. M., Precipitation and Temperature in Texas in 1893, 134; Summer Hot Winds on the Great Plains, 175; 354; 380.
- Cloud Formation, 157.
- Cloudiness, A New Method of Estimating,
- Cloudland, Ley's, 460.
- Cloud Measurements, Photographic, 73. Cloud Photographs and Lantern Slides,
- List of, III.
 Clouds, Changes in the Definitions of,
- since Howard, 83.

 Clouds, Cumulus, Observations on, at
 Winthrop, Mass., 350.
- Clouds, Festooned, Mammiform, and Pocky, 151.
- Clouds, On the Modifications of, 119.
- Clough, H. W., Periodicity in Weather Phenomena, 269.
- Comparative Observations with two Thermometer Screens, 27.
- Congress, Meteorological, at Antwerp, 237, 268.
- Correspondence, 77, 268, 347, 425.
- Croll's Glacial Theory, 441.
- Cultivation, The Effect of, on Rainfall in California, 232; Popular Ideas as to the Effect of, on Rainfall, 451.
- Cumulus Clouds, Observations on, at Winthrop, Mass., 350.
- Currents of the Great Lakes, 34.
- Curtis, H. P., The Terms Cyclone and Tornado, 425.
- Curtis, R. H., 236.
- Cyclone and Tornado, The Terms, 425. Cyclones, Development and Movement of, 35.

- Cyclones of the Southern Pacific Ocean,
- Cyclones of the Temperate Latitudes, Cause of the, 359.
- Cyclonic Precipitation in New England, 241, 275.
- DAILY Period of Wind Velocity on Mountains, 234.
- Dakota Weather Service, Report of the,
- Dallas, W. L., 193, 198.
- Davis, J. W., 235.
- Davis, W. M., Note on Diffusion of Water Vapor and Atmospheric Absorption of Terrestrial Radiation, 147; Festooned, Mammiform, and Pocky Clouds, 151, Croll's Glacial Theory, 441.
- Death Rate, Mean Quarterly Temperature and the, 72.
- Deforestation, the Effect of, on Water Supply, 229.
- Denza, Father Francesco, 424.
- Destructive Effects of Winds on Sandy Soils, 351.
- Development and Movement of Cyclones,
- Dines, W. H., 72; Cause of the Cyclones of the Temperate Latitudes, 359.
- Disease, Effects of Weather Changes in Causing, 354.
- Distribution of Thunderstorms over the Earth's Surface, 353.
- Distribution of Weather Forecasts in New England, 195.
- Donald, C. W., 69.
- Douglass, A. E., Study of Atmospheric Currents with Telescopes, 395.
- Duration and Lateral Extent of Gusts of Wind, 72.
- Dust, The Work of, 265.
- EARTH Temperatures at Cronkbourne, Isle of Man, 144.
- Eclipses of the Sun, Total, 120.
- Editorial Note, 431.
- Edson, H. R., 387.
- Effects of Weather Changes in Causing Disease, 354.
- Ekholm, Nils, Psychrometer Studies, 289.

Electrical Literature, 37.

Electricity, Atmospheric, at Sea, 413; Influence of Telephone Wires on, 421. Ellis, W., 144.

Equinoctial Storms at Galveston, Texas, 389.

Errata, 392, 457.

FASSIG, O. L., 37, 81, 122, 154, 239, 274, 317, 356, 393, 428.

Fergusson, S. P., The Pole Star Recorder, 62.

Fernow, B. E., 229.

Festooned, Mammiform, and Pocky Clouds, 151.

Fogs with Strong Winds in the British Isles, 236.

Forecasting of Ocean Storms, 211.

Forecasts in Sweden, Weather Maps and, 350.

Frequency of Amounts of Precipitation, 123.

GALES and Strong Winds, Characteristic Features of, 236.

Galveston, Texas, Equinoctial Storms at, 389.

Gawthrop, H., Variations in the Character of the Seasons, 332.

Great Lakes, Currents of the, 34. Guericke's Magdeburg Experiments, 466. Gulf Storm Notes, 368.

Guppy, H. B., 391.

HAIL, Remarkable, 391.

Hann, J., 234.

Harrington, M. W., 34, 36; The Texan Monsoons, 41; 117; Frequency of Amounts of Precipitation, 123, 264, 381.

Harvard College Meteorological Stations in Peru, 76.

Harvard College Station at Arequipa, A View of the, 146.

Hazen, H. A., Psychrometer Tables, 78; Psychrometer Studies, 107; 371; Sunspots and Auroras, 221; Moon and Rainfall, 373; Periods in Temperature, 416. Hellmann's "Neudrucke," 424.

Helmholtz, Meeting in Memory of, 421. Henry, A. J., Precipitation of North Carolina, 6.

Hodgkins Fund Prizes, 424.

Hodgkins, T. G., 71.

Hot Winds on the Great Plains, 175.

Howard, Luke, 119.

Humidity over the Arabian Sea and Persian Gulf, 193.

Hurricane of Sept. 25-27, 1894, 341.

Hyatt, J., Rainfall Records at Honeymead Brook, N. Y., 29.

CE Needles on Roan Mountain, Tenn., 387.

India, Meteorological Department of, 450.

Influence of Telephone Wires on Atmospheric Electricity, 421.

International Committee of Meteorology, 27, 303, 425.

Inwards, R., 143.

Iowa, Tornadoes in, in September, 344.
Iowa Weather and Crop Service, Report of the, 423.

| ELINEK, C., 78.

Jenkins, S., 267.

KASSNER, C., 73, 74.

King, F. H., 351. Kite, as a Life-Saver at Sea, 235.

Kites, Meteorological Records obtained by Means of, 297.

Klossovsky, A., 353.

Knipping, E., 65.

Knott, S. C., 422.

Kretzer's Lightning Record, 468.

Las Palmas, Temperature, Rainfall and Sunshine at, 27.

Lenard, P., 265.

Levy, I. H., A Device to Facilitate the Accurate Reading of the Barometer, 153; A Method of Ventilating the Psychrometer, 272.

Ley's Cloudland, 460.

Lightning, Protection from, 144. Lightning Record, Kretzer's, 468.

MAGIE, W. F., Atmospheric Electricity at Sea, 413.

Magnetic Storm of Feb. 20 to March 1, 1894, 18.

1894, 18.

Magrath, Geo. B., Sea Breeze at Boothbay Harbor, Me., 10.

Mammiform, Festooned, and Pocky Clouds, 151.

Marine Nephoscope, The, 54.

Marriott, W., 27, 144.

Marvin, C. F., 35, 427.

McAdie, A., 144, 468.

Mean Temperatures of the Arabian Sea and Persian Gulf, 193.

Meteorograph, A Long-Period, 392. Meteorological Committee, International,

303, 425. Meteorological Congress at Antwerp,

237, 268. Meteorological Congress, Report of the

Chicago, 79.

Meteorological Department of India,

450. Meteorological Institute, Prussian, 343.

Meteorological Institute, Frussian, 343.
Meteorological Institute, Saxony, 23, 423.
Meteorological Phenomena in Alaska,
22.

Meteorological Problems for Mathematical Students, 15.

Meteorological Records obtained by Kites, 297.

Meteorological Services of South America, 187, 201.

Meteorological Society, New England, 76, 455.

Meteorological Society, Royal, 27, 72, 143, 236, 391, 422, 454.

Meteorological Stations in Peru, The Harvard College, 76.

Meteorological Work in Australia, 445. Meteorology and Geodesy, 1.

Meteorology at the British Association,

Meteorology at the University of California, A New Course in, 192.

Meteorology, International Committee of, 27.

Mississippi, Meteorological Summary for, during 1893, 25.
Misti, A View of the, 146.
Modifications of Clouds, On the, 119.
Monsoons, The Texan, 41.
Mont Blanc, Observations on, 31.
Moon and Rainfall, 373.
Moore, A. W., 144.
Mossman, R. C., 145.
Mountains, Daily Period of Wind Velocity on, 234.
Munich, Recent Scientific Balloon As-

NAMES of the Winds, 67.

cents at, 419.

Nephoscope, The Marine, 54.

New England, Cyclonic Precipitation in, 241, 275.

New England, Distribution of Weather Forecasts in, 195.

New England Meteorological Society, 76, 455.

New England Weather Service, Summary of, 453.

New Jersey Weather Service, Annual Report of the, 236.

Newspapers and the Weather Bureau, 347.

Newspaper Weather Maps of the United States, 96.

New York Weather Service, Report of the, 343.

North Atlantic, New Pressure Charts of the, 462.

Notes on the Hurricane of Sept. 25-27, 1894, 341.

OBSERVATIONS on Mont Blanc, 31.

Ocean Storms, Forecasting of, 211.

O'Leary, T. S., The Barometer at Sea, 256.

Olsson, K. G., 73.

DAGUE, B. S., 192, 232.

Periodicity in Weather Phenomena, 269. Periods in Temperature, 416.

Persian Gulf, Mean Temperatures of the, 193. Peru, The Harvard College Meteorological Stations in, 76.

Phenomena of the Upper Air, 143. Photographic Cloud Measurements, 73.

Pocky, Festooned, and Mammiform Clouds, 151.

Pole Star Recorder, The, 62.

Polis, P., 391.

Precipitation and Temperature in Texas for 1893, 134.

Precipitation, Cyclonic, in New England, 241, 275.

Precipitation, Frequency of Amounts of, 123.

Precipitation of Southwestern North Carolina, 6.

Pressure Charts of the North Atlantics

Protection from Lightning, 144.

Prussian Meteorological Institute, Report of the, 343.

Psychrometer, A Method of Ventilating the, 272.

Psychrometer Studies, 107, 289, 371.

Psychrometer Tables, 78. Publications Received, 156.

RADIATION, Atmospheric Absorption of Terrestrial, 147.

Rainfall at Las Palmas, 27.

Rainfall, Effect of Cultivation on, 451. Rainfall in California, Effect of Cultiva-

tion on, 232.

Rainfall Records at Honeymead Brook,
Dutchess Co., N. Y., 29.

Rainfall, The Moon and, 373.

Rainmakers at Work, The, 196.

Recent Explorations of the Upper Air, 340.

Recent Scientific Balloon Ascents at Munich, 419.

Relation between Sunspots and Weather over the Bay of Bengal, 198.

Remarkable Hail, 391.

Rhythm in the Weather, 376.

Rotch, A. L., South American Barometric Standards, 23; Observations on Mont Blanc, 31; The Meteorological Services of South America, 187, 201; Meeting of the International Meteorological Committee, 303; Meteorology at the British Association, 311; Boletim Geographica de S. Paulo, 345.

Roumanian Weather Service, 20, 345, 454. Royal Meteorological Society, 27, 72, 143, 236, 391, 422, 454.

Rubenson, R., Weather Maps and Forecasts in Sweden, 350.

Rung, G., 462.

Russia, Thunderstorms of, 364.

SAXON Meteorological Institute, 23, 423.

Saxony, Thunderstorms of, 24.

Schmidt, A., 273.

Scott, R. H., 73, 236, 422.

Sea Breeze at Boothbay Harbor, Me., 10.

Seasons, Variations in the Character of the, 332.

Seven-Day Thunderstorm Periods, 74. Soils, Destructive Effects of Winds on

Sandy, 351. Solar Magnetism in Meteorology, 319. Some Phenomena of the Upper Air, 143.

Some Phenomena of the Upper Air, 143. Sonnblick Verein, Second Annual Report of the, 196.

Southall, H., 422.

South American Barometric Standards, 23.

South America, The Meteorological Services of, 187, 201.

Southern Pacific Ocean, Cyclones of the, 65.

Sprague, F. W., 121.

Spring, The Advent of, 117.

Stearns, W. D., Gulf Storm Notes, 368. Stephenson, M. L., The Blackberry

Winter, 349.

Storms, The Forecasting of Ocean, 211. Storm, The Story of a, 121.

Storm Tracks off the Eastern Coast of the United States, 346.

Story of a Storm, The, 121.

Summer Hot Winds on the Great Plains,

Sunshine at Las Palmas, 27.

Sunspots and Auroras, 221.

Sunspots and Weather at Aix-la-Chapelle, 391. Sunspots and Weather over the Bay of Bengal, 198.

Sweden, Weather Maps and Forecasts in, 350.

Sweetland, A. E., Observations on Cumulus Clouds at Winthrop, Mass., 350. Switzerland, Thunderstorms of, 435.

Systematic Exploration of the Upper Air, 264.

TAYLOR, J. C., 27.

Telephone Wires, Influence of, on Atmospheric Electricity, 421.

Temperature at Las Palmas, 27.

Temperature, Mean Quarterly, and Death Rate, 72.

Temperature, Periods in, 416.

Temperature Periods, Seven-Day, 74.

Temperature, Precipitation and, in Texas for 1893, 134.

Temperatures, Arctic, 267.

Terrestrial Radiation, Atmospheric Absorption of, 147.

Texan Monsoons, The, 41.

Texas, Precipitation and Temperature in, for 1893, 134.

Theophrastus on Winds and on Weather Signs, 315.

Thermometer Screens, Observations with,

Thermometry, 464.

Thunderstorm Periods, Seven-Day, 74. Thunderstorms, Distribution of, over the Earth's Surface, 353.

Thunderstorms of Saxony, 24.

Thunderstorms of Saxony, 24.

Thunderstorms, Recent Foreign Studies
of, 364, 435.

Tides off the Dutch Coast, 238.

Titles of Recent Publications, 37, 81, 122, 154, 239, 274, 317, 356, 393, 428. Todd, M. L., 120.

Tornadoes in Iowa in September, 344.

Tornado Studies, 345.
Tornado, The Terms Cyclone and, 425.

Total Eclipses of the Sun, 120.

Typhoons of the Year 1893, 426.

MLAUFT, F., 67.

University of California, A New Course in Meteorology at the, 192. Upper Air, Meteorological Records in, obtained by Means of Kites, 297.

Upper Air, Recent Explorations of the, 340.

Upper Air, Some Phenomena of the, 143.
Upper Air, Systematic Exploration of the, 264.

Upton, W., Cyclonic Precipitation in New England, 241, 275.

VARIATIONS in the Character of the Seasons, 332.

Vapor Tension Conditions of the Arabian Sea and Persian Gulf, 193.

Veeder, M. A., Aurora of March 30, 1894, 77.

Veeder's Auroral Results, 28.

Velocities of Wind, Relative Frequency of Different, 144.

Von Bezold, W., On Cloud Formation, 157.

WARD, R. DEC., The Newspaper Weather Maps of the United States, 96; List of Cloud Photographs and Lantern Slides, 111; Recent Foreign Studies of Thunderstorms, 364, 435.

Water Supply, The Effect of Deforestation on, 229.

Water Vapor, Diffusion of, 147.

Watts, H. M., Newspapers and the Weather Bureau, 347.

Weather and Sunspots at Aix-la-Chapelle, 391.

Weather and Sunspots over the Bay of Bengal, 198.

Weather Bureau, Newspapers and the, 347.

Weather Bureau Notes, 15, 75, 117, 146, 268, 452.

Weather Bureau, Report of the Chief of the, 36, 313.

Weather Changes, Effects of, in Causing Disease, 354.

Weather Forecasts, Distribution of, in New England, 195.

Weather Making, Ancient and Modern,

Weather Maps and Forecasts in Sweden, 350.

- Weather Maps, the Newspaper, of the United States, 96.
- Weather Phenomena, Periodicity in, 260.
- Weather Review, Alabama, 37.
- Weather, Rhythm in the, 376.
- Weather Service, Dakota, 355.
- Weather Service, New England, Summary of the, 453.
- Weather Service, New Jersey, Annual Report of the, 236.
- Weather Service, New York, Report of the, 343.
- Weather Service, Roumanian, 20, 345.
- Weather Signs, Theophrastus on Winds and on, 315.
- Wind, Duration and Lateral Extent of Gusts of, 72.

- Wind, Relative Frequency of Different Velocities of, 144.
- Wind Velocity, Daily Period of, on Mountains, 234.
- Winds and Weather Signs, Theophrastus on, 315.
- Winds, Characteristic Features of Gales and of, 236.
- Winds, Destructive Effects of, on Sandy Soils, 351.
- Winds, Names of the, 67.
- Winds, Summer Hot, on the Great Plains, 175.
 - Winter on Ben Nevis, A Rough, 145.
- Winthrop, Mass., Observations on Cumulus Clouds at, 350.
- Wollaston, A. B., 391.



